

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
OTHER DEFENSE ACTIVITIES
(Tabular dollars in thousands, Narrative in whole dollars)

ENVIRONMENT, SAFETY AND HEALTH DEFENSE

PROGRAM MISSION

The Office of Environment, Safety and Health (EH) is a corporate resource that provides leadership and departmental management excellence to protect the workers, the public, and the environment. This commitment to excellence is demonstrated by continuously striving for improvement by developing meaningful programs and policies; conducting independent oversight of environment, safety, health, safeguards and security (S&S) performance; and providing technical assistance, resources, and information sharing. Open communication, participation, and performance feedback on EH activities from affected parties are integral to EH's success. The hallmark and highest priority of all EH activities is daily excellence in the protection of the workers, the public, and the environment. The Office of Environment, Safety and Health defense activities are concentrated into three business functions within one decision unit: Oversight, Health Studies, and the Radiation Effects Research Foundation (RERF) support; and a program direction decision unit.

OVERSIGHT: These activities provide information and analysis needed to ensure that the Department of Energy (DOE) and contractor management, the public, the Secretary of Energy, and the Assistant Secretary for Environment, Safety and Health have an accurate, comprehensive understanding of the effectiveness, vulnerabilities, and trends of the Department's environment, safety, and health, and safeguards and security policies and programs. These activities include the EH Site Resident Program, Independent Assessments, Accident Investigation, Analysis, Price-Anderson Amendments Act Enforcement, and the Departmental Representative to the Defense Nuclear Facilities Safety Board (DNFSB).

HEALTH STUDIES: These activities include Occupational Medicine, including medical surveillance; Epidemiologic Studies, including surveillance of worker injury and illness; and International Health Programs, including the Marshall Islands program, and health studies in the former Soviet Union.

RADIATION EFFECTS RESEARCH FOUNDATION (RERF): In this activity the Department of Energy supports analysis of the medical effects of radiation, with the intention of contributing to the maintenance of the health and welfare of atomic bomb survivors and to the enhancement of worldwide radiation protection practices and standards.

The **GOAL** of the EH Defense programs is to continually provide excellent Department-wide environment, safety, health, and safeguards and security support by:

- Providing consistent, multidisciplinary, credible independent oversight processes for appraising the effectiveness of environment, safety, health, and safeguards and security programs.
- Providing actions that prevent recurrence to worker injuries, property damage and environmental damage due to accidents.
- Coordinating processes with field and program offices; and reporting appraisal results to DOE senior management, the Congress, and the Defense Nuclear Facilities Safety Board.
- Ensuring initiatives relative to ES&H and S&S throughout the complex are analyzed and disseminated as appropriate.
- Ensuring that follow-up corrective actions of all EH oversight activities are effective.
- Ensuring increased contractor accountability for safety through oversight of Price-Anderson Amendments Act.
- Promoting high quality workplace medical services to DOE and contractor employees.
- Using epidemiologic analysis to examine associations between exposures or conditions at DOE sites and potential adverse health effects among groups of workers and offsite populations.
- Managing the health and environmental programs in the Marshall Islands for those exposed to ionizing radiation.
- Expanding the knowledge of dose-response relationships of health effects of radiation using workers and populations with unique exposure to radiation as a result of accidents or environmental contamination in the former Soviet Union.
- Continuing United States participation in support of the Radiation Effects Research Foundation.

The **OBJECTIVES** related to this goal are:

- Identify, prioritize, and conduct assessments and special studies to determine the effectiveness of the Department's environment, safety, health, and safeguards and security policies and programs by providing coordinated and consistent independent oversight to customers.
- Report appraisal results to DOE senior management, the Congress, and the Defense Nuclear Facilities Safety Board.
- Improve the performance and effectiveness of the Department's workforce and contractor employees in matters related to environment, safety, health, and safeguards and security.
- Conduct and/or monitor accident investigations with a focus on identifying systemic causes so that further accidents can be prevented.
- Encourage contractors to voluntarily comply with nuclear safety requirements by encouraging proactive contractor initiatives to identify deficiencies before actual problems occur.
- Support, collect, analyze and disseminate lessons learned and exemplary practices to enhance performance and safety.
- Support the systematic collection, analysis, and sharing of data on worker injury and illness, with the aim of detecting emerging health issues; and evaluating the impacts of changes in health and safety practices at DOE sites.
- Investigate the effects of radiation exposure on the exposed populations in the Marshall Islands.
- Investigate the effects of radiation exposure on the children and workers exposed by the Chernobyl accident and exposed populations in the former Soviet Union and Eastern Europe.
- Collect and analyze data on the effects of radiation exposure on the survivors of the bombings of Hiroshima and Nagasaki, Japan.
- Support studies to assess the health of the DOE workforce and of populations living near DOE sites in order to determine if worker or community health has been negatively impacted by DOE operations.
- Identify, address, resolve, and close management and technical issues necessary for ensuring protection of public health and safety, whether the issues were originally raised internally or externally.

PERFORMANCE MEASURES: Performance measures are primarily qualitative rather than quantitative. However, some quantitative performance measures are:

- Downward trends in previously identified issues that lead to environmental releases.
- Decreased rates of occupational injury and illness.
- Downward trends in the recurrence of accidents.
- Increased customer satisfaction with oversight priorities, timeliness, consistency, and quality.
- Significant reductions in recurrence of environment, safety, health, and safeguards and security issues.
- Decreased radiological exposures and number of nuclear safety violations.
- Identification of at-risk worker populations, and employment of appropriate mitigation measures to avoid adverse health outcomes by implementation of a program that establishes systematic linkages between job/task analyses, exposure assessments, medical monitoring, and epidemiological analysis.
- Initiation of investigation of reported health concerns, within 30 days of identification.
- Satisfaction of former workers that issues surrounding their potential for occupationally-related disease are being addressed.
- Reduced number of outstanding actions and commitments for resolving environmental, health and safety issues identified by the Defense Nuclear Facilities Safety Board.

SIGNIFICANT ACCOMPLISHMENTS AND PROGRAM SHIFTS: Significant accomplishments and program shifts are defined within the respective business line descriptions that follow.

ENVIRONMENT, SAFETY AND HEALTH DEFENSE¹**(Dollars in thousands)****PROGRAM FUNDING PROFILE**

<u>Sub-Program</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
<u>EH-Defense</u>					
Operating Expenses					
Oversight	\$ 14,526	\$ 14,015	0	\$ 14,015	\$ 13,775
Health Studies	38,568	45,985	0	45,985	41,456
RERF	15,000	14,000	0	14,000	14,000
Program Direction	10,706	20,000	0	20,000	4,769
Adjustment (use of prior year balances)	<u>0</u>	<u>0</u>	<u>-476</u>	<u>-476</u>	<u>0</u>
TOTAL, EH DEFENSE PROGRAMS	\$ 78,800	\$ 94,000	-476	\$ 93,524	\$ 74,000
TOTAL FTEs	95	203	0	203	46

¹ Authorizations:

P.L. 83-703, "Atomic Energy Act of 1954"

P.L., 100-408, "Price Anderson Amendments Act of 1988"

ENVIRONMENT, SAFETY AND HEALTH DEFENSE
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Albuquerque Operations Office					
Mason & Hanger	75	80	0	80	80
Sandia National Laboratory	180	200	0	200	190
Los Alamos National Laboratory	190	210	0	210	200
Operations Office	<u>108</u>	<u>115</u>	<u>0</u>	<u>115</u>	<u>105</u>
Subtotal	553	605	0	605	575
Chicago Operations Office					
Brookhaven Science Associates	2,600	2,870	0	2,870	2,650
Idaho Operations Office					
Idaho National Eng. & Env. Lab.	195	220	0	220	200
Nevada Operations Office					
Bechtel Nevada	2,584	2,890	0	2,890	2,680
Ohio Field Office					
Fluor Daniel	35	40	0	40	40
Oak Ridge Operations Office					
Oak Ridge Institute for Science & Education	2,526	2,830	0	2,830	2,620
Lockheed Martin Energy Systems	50	50	0	50	50
Oak Ridge National Laboratory	130	150	0	150	130
Office of Scientific & Technical Information	102	110	0	110	110
Operations Office	<u>2,311</u>	<u>1,500</u>	<u>0</u>	<u>1,500</u>	<u>0</u>
Subtotal	5,119	4,640	0	4,640	2,910

ENVIRONMENT, SAFETY AND HEALTH DEFENSE
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Rocky Flats Field Office					
Kaiser Hill Co.	1,222	1,370	0	1,370	1,260
Richland Operations Office					
Pacific Northwest Laboratories	6,723	5,375	0	5,375	5,065
Hanford Environmental Health Foundation	<u>170</u>	<u>190</u>	<u>0</u>	<u>190</u>	<u>180</u>
Subtotal	6,893	5,565	0	5,565	5,245
Oakland Operations Office					
Lawrence Livermore National Laboratory	2,421	2,710	0	2,710	2,510
Operations Office	<u>3,207</u>	<u>15,860</u>	<u>0</u>	<u>15,860</u>	<u>15,720</u>
Subtotal	5,628	18,570	0	18,570	18,230
Savannah River Operations Office					
Operations Office	1,101	1,230	0	1,230	1,140
Washington Headquarters (includes program direction funds)	<u>52,870</u>	<u>56,000</u>	<u>-476¹</u>	<u>55,524</u>	<u>39,070</u>
 TOTAL	 \$ 78,800	 \$ 94,000	 -476	 \$ 93,524	 \$ 74,000

¹ use of prior year balances

ENVIRONMENT, SAFETY AND HEALTH DEFENSE

OVERSIGHT

I. Mission Supporting Goals and Objectives

The mission of the Oversight program is to provide the information and analysis needed to ensure that the Secretary of Energy, Assistant Secretary for Environment, Safety and Health, Department and contractor management, Congress, workers, unions, and the public have an accurate and comprehensive understanding of the effectiveness, vulnerabilities, and trends of the Department's environment, safety, health, safeguards and security policies and programs. The primary goal of the Office of Oversight is to be a catalyst that promotes constructive change in Department environment, safety, health, safeguards, and security management programs. This goal is accomplished by independently assessing and analyzing the status of environment, safety, health, safeguards, and security programs; accurately reporting the status to DOE managers and other constituents; and conducting timely follow-up activities to validate that appropriate actions are being taken. The mission of the Oversight program is accomplished through the following key activities:

EH Site Residents provide real time feedback on the status of field environment, safety, health, safeguards, and security programs. The EH Site Residents evaluate performance through a comprehensive surveillance program, follow up and verify closure of identified deficiencies, and provide regular updates on the status of corrective actions and upgrades.

Assessments of environment, safety, health, safeguards, and security policies and implementation of policies by Department line management organizations are performed. Assessments are an independent evaluation of Departmental performance against orders, standards, policies, and other pertinent regulations, with a particular emphasis on DOE line management performance with respect to DOE's integrated safety management policy.

Accident Investigation Program ensures that accidents occurring at DOE sites are adequately investigated such that root causes are determined, lessons learned are disseminated, and corrective actions are implemented and verified. Oversight conducts systematic investigations of the most serious (Type A) accidents and guides and monitors the conduct of less serious accidents (Type B), which are performed by the field elements. Oversight also provides guidance for performing investigations and performs analysis of trends and precursors.

Analysis ensures integrated collection, analysis and dissemination of results of oversight activities, analyzes management evaluation data, from oversight activities provides the information necessary to plan and schedule evaluation efforts, and maintains the supporting infrastructure elements which ensure that adequate follow-up is performed at DOE sites.

Enforcement provides oversight of the Price-Anderson Amendments Act enforcement activities of the Department. This primarily includes conducting investigations and technical evaluations of DOE contractors performing nuclear operations at DOE sites which are indemnified under the Price-Anderson Amendments Act. Contractors are encouraged to be proactive in identifying and correcting nuclear safety deficiencies to minimize enforcement actions.

Defense Nuclear Facilities Safety Board (DNFSB) provides effective cross-organizational leadership in resolving Board-related technical and management issues necessary to ensure public health and safety. This office represents the Secretary in regular and continuing interactions with the Board, and advises the Secretary, Under Secretary, Secretarial Officers, and other Department Executives of the Board's priorities, concerns, actions and plans.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
Site Residents	\$1,100	\$900	\$900	\$0	0%
Assessments	10,851	10,240	10,000	-240	-2%
Accident Investigation	400	300	300	0	0%
Analysis	1,400	1,000	1,000	0	0%
Enforcement	275	975	975	0	0%
DNFSB	<u>500</u>	<u>600</u>	<u>600</u>	<u>0</u>	0%
Total Oversight	<u>\$14,526</u>	<u>\$14,015</u>	<u>\$13,775</u>	<u>-\$240</u>	<u>-2%</u>

**ENVIRONMENT, SAFETY AND HEALTH DEFENSE
OTHER DEFENSE ACTIVITIES
OVERSIGHT
(Dollars in thousands)**

III. Performance Summary Accomplishments

EH Site Residents

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Collect site data to allow EH Site Residents to more efficiently perform their baseline program, including over 200 comprehensive and systematic surveillances and followup of assessment results.	\$500	\$500	\$500
- Develop, refine, and implement methods and procedures for collecting, collating, evaluating, storing, and retrieving data for analysis of data in the field.	100	100	100
- Perform special reviews as needed to provide information to DOE management about ongoing problem areas and to increase effectiveness of EH Resident Oversight; provide followup to other Office of Oversight reviews and assessments.	100	100	100
- Provided field input to the initial set of 20 site profiles, which provide a consistent and uniform approach for maintaining an accurate and current profile of the status of hazards, strengths, weaknesses, and upgrades at key DOE facilities and provide a basis for DOE-wide priorities and focusing assessments on significant problems and trends. This comprises the first comprehensive compendium of environment, safety, and health issues at DOE facilities. Provided field-validated input to site profiles for additional facilities and expanded scope to include safeguards and security issues.	200	--	--
- Continually monitor field activities and provide input to maintain the site profiles and follow-up activities to ensure DOE managers have current and validated information.	<u>200</u>	<u>200</u>	<u>200</u>
TOTAL - EH Site Residents	\$1,100	\$900	\$900

III. Performance Summary Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Assessments			
- Conduct an ongoing program of environment, safety, and health assessments consisting of reviews of 4-6 major sites per year using the integrated safety management system policy as a framework for evaluating line management performance. Oversight assessments have and continue to identify significant, systemic ES&H vulnerabilities. These assessments are the Department's comprehensive and integrated approach to independent oversight of DOE and contractor line management. They provide a clear, positive benefit to the Department through safety risk and liability reduction, significant cost reductions, and the elimination of unwise expenditures.	\$ 3,100	\$ 3,100	\$ 3,100
- Conduct an ongoing program of safeguards and security assessments consisting of reviews of major sites each year and development and maintenance of a comprehensive baseline of safeguards and security programs. Enhanced the safeguards and security assessments by applying the guiding principles of safety management to safeguards and security.	2,000	1,900	1,800
- Perform special studies of policy, programs, and implementation in the field to identify program strengths and weaknesses, and provide information to DOE managers such that strengths can be shared and weaknesses can be corrected.	1,200	1,100	1,100
- Continues the first systematic program to follow up on the implementation of corrective actions that have been identified as necessary for the protection of the environment and the safety and health of workers and the public. This is a vital link in the chain to implement accountability of line management for ES&H performance. Particular attention will be placed on sites previously identified as having significant ES&H problems such as Los Alamos, Brookhaven, Rocky Flats, and Hanford. Data from this program are used to develop the site profiles, which are used by senior Department managers in site-specific decisionmaking.	3,400	3,300	3,200
- Implemented qualification standards program; Oversight personnel achieved greater than 90 percent of the qualification standards during the first year. Personnel development and requalification programs are ongoing.	251	240	200

III. Performance Summary Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Continue the program for certifying safeguards and security personnel by administering challenging certification tests designed to demonstrate topical knowledge and the ability to apply that knowledge to real-world problems.	\$100	\$100	\$100
- Revise and refine methods and procedures to include disseminating useful tools to increase the effectiveness of field programs.	600	400	400
- Maintain and update a comprehensive set of performance objectives and criteria which expand on the guiding principles of safety management. This document provides a template for an effective safety management program, and is periodically updated and enhanced to increase the effectiveness and efficiency of the assessments program.	<u>200</u>	<u>100</u>	<u>100</u>
TOTAL - Assessments	\$10,851	\$10,240	\$10,000
Accident Investigation Program			
- Conduct Type A accident investigations as needed at DOE facilities. Continue streamlining and enhancing accident investigation program to be more effective in reducing future accidents (e.g., reports that focus on lessons learned), more useful to managers (e.g., streamlined reporting procedures that result in more concise reports in a shorter time frame), and more efficient (e.g., reduced time to produce report), while enhancing the quality of the investigations.	100	100	100
- Developed functional program materials and presented accident investigation techniques and revised methods for implementing accident investigation program to DOE Headquarters and field personnel.	100	--	--
- In accordance with the Office of Oversight's responsibility for direction and management of the DOE accident investigation program, development continues of training tools, such as handbooks, for use by the field for conduct of accident investigation.	100	100	100
- Continually refine and implement programs for analyzing accident trends, disseminating lessons learned, following up on corrective actions, and identifying precursors to accidents to include review of accident Type B investigations performed by the field. This information is incorporated into the Office of Oversight's analysis program to provide a comprehensive program.	<u>100</u>	<u>100</u>	<u>100</u>
TOTAL - Accident Investigation Program	\$400	\$300	\$300

Analysis

- Provide baseline technical support to implement the analysis program to include subject matter expertise, policy analysis, trending, coordination of followup efforts, document control center, data analysis, and reporting (including annual reports and special papers).	600	650	650
- Develop and maintain Oversight program infrastructure, including procedures, handbooks, information management systems, and tools (e.g., the Oversight home page).	200	100	100
- Develop the infrastructure and programmatic guidance for the comprehensive certification program that includes the technical qualification program standards, safeguards and security certification programs, and appraisal analysis of management systems.	300	150	150
- Develop, disseminate, and update the site profiles based on input from the EH Residents and assessment results.	<u>300</u>	<u>100</u>	<u>100</u>
TOTAL - Analysis	\$1,400	\$1,000	\$1,000

Enforcement

- Conduct the Price-Anderson Enforcement program in cooperation with DOE Field and Program Offices at each DOE nuclear site and perform nuclear safety enforcement activities.			
- Conduct Price-Anderson-related investigations and technical evaluations of DOE nuclear safety requirements involving DOE indemnified contractors utilizing a process that provides for an orderly transition to an external enforcement regulator in the future.			
- Encourage contractors to proactively identify and correct nuclear safety deficiencies using an enforcement approach similar to the commercial nuclear industry.			
TOTAL - Enforcement	\$275	\$975	\$975

III. Performance Summary Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Defense Nuclear Facilities Safety Board Liaison			
	\$ 175	\$ 200	\$ 200
- Coordinate the Board recommendation process through line organizations by developing responsive implementation plans, resolving technical and management issues, completing commitments, and ultimately closing recommendations. Historically, the Department receives 4-5 major Board recommendations each year and is actively working 15-20 open recommendations.			
- Manage the Department's interface activities and provides direction and advice to line managers on Board-related matters. Participates in, and manages preparation and follow-up for over 300 annual meetings and site visits between Department staff and Board staff.	125	150	150
- Coordinate responses to Board reports and inquiries. Manages the Department's Safety Issues Management System (SIMS) for Board-related issues, commitments, and actions, which tracks over 1000 Department commitments and actions related to Board recommendations and other correspondence.	75	100	100
- Maintain the Department's central repository of official Board communications and makes this information available complex-wide to Department and contractor personnel. Annually, 250-350 pieces of Board/Department correspondence are received and addressed. This information is available to the public on the Internet. Over 1400 pieces of Board/Department correspondence are available on the web site in multiple file formats for customer convenience. Documents are posted in 1-3 business days to facilitate action.	125	150	150
TOTAL - Defense Nuclear Facilities Safety Board Liaison	<u>\$500</u>	<u>\$600</u>	<u>\$600</u>
TOTAL - Oversight Activities	<u>\$14,526</u>	<u>\$14,015</u>	<u>\$13,775</u>

Explanation of Funding Changes from FY 1998 TO FY 1999

Assessments: Reduction and streamlining of contractor utilization, as well as a reduction of one management evaluation (made possible by effective analysis of data available from management evaluations, special studies, and site resident reports) enables Oversight to continue to reduce the cost of conducting the baseline assessment programs. Also, better information systems, analysis of data, and evaluator training allows assessments to be conducted more efficiently. (-\$240,000)

ENVIRONMENT, SAFETY AND HEALTH DEFENSE

HEALTH STUDIES

I. Mission Supporting Goals and Objectives

The Health Studies program promotes the health and safety of DOE's workers and communities surrounding Department sites, and supports analyses to understand the effects of radiation on humans. It is comprised of three programs: Occupational Medicine, Epidemiologic Studies, and International Health Programs.

Occupational Medicine provides the Department's occupational medicine clinics with tools that automatically link medical, exposure and job information into one record per worker. This system and other such tools are developed to assist clinics in identifying and tracking occupationally-related health effects among worker populations and identifying opportunities to initiate preventive or mitigative measures.

Epidemiologic Studies provide worker injury and illness data collected to identify emerging worker health issues associated with job exposures and to evaluate the impact of health and safety practices at DOE facilities. Many of these studies are conducted in partnership with the Centers for Disease Control and Prevention (CDC) under a Memorandum of Understanding (MOU) with the Department of Health and Human Services (HHS). This program also supports studies to assess the health of populations living near DOE sites in order to determine if the health of the host communities has been impacted by DOE operations. Information from those health studies is communicated to the DOE workforce, line management and community stakeholders.

International Health Programs provide health and environmental programs in the Marshall Islands that are managed for those populations and land areas exposed to fallout from the Castle BRAVO atmospheric nuclear test. In addition, research programs are supported to expand the knowledge of dose-response relationships and resulting health effects of radiation exposure based on studies of workers and populations exposed to radiation as a result of accidents or environmental contamination in the former Soviet Union.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
Occupational Medicine	\$6,000	\$11,335	\$12,426	\$+1,091	+10%
Epidemiologic Studies	22,768	23,050	17,430	-5,620	-24%
International Programs					
-Marshall Islands	6,800	6,800	6,800	0	0%
-Other Programs	<u>3,000</u>	<u>4,800</u>	<u>4,800</u>	<u>0</u>	<u>0%</u>
Total Health Studies Program	\$ 38,568	\$ 45,985	\$ 41,456	\$ -4,529	-10%

III. Performance Summary - Accomplishments

Occupational Medicine

Medical Surveillance of Current and Former Workers

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Provide medical examinations and programs for 2,000 to 3,000 current and former DOE employees at risk for occupational disease, including berylliosis. Plan and implement expanded medical surveillance across DOE sites to protect cleanup workers. Continue program to support research and innovation in exposure assessment and medical studies. Increase support for DOE former workers program, in response to Section 3162 of the Defense Authorization Act of 1993, by implementing the second phase of the ongoing pilot program at six DOE sites for evaluating the health of former workers who may be at significant risk due to past occupational exposures. Expand program to include four additional sites during FY 1998. In FY 1999, continue all 10 awards.	\$ 4,450	\$ 9,650	\$ 10,741
- Continue testing and demonstration of the Medical Surveillance Information System (MSIS).	950	900	900
- Continue support to medical line management program that includes technical assistance visits to site occupational medicine clinics to support operations office efforts in providing direction in the efficient delivery of quality occupational medical services; completion of medical standards rulemaking for the Personnel Assurance Program; the Protective Force Medical Standards (10 CRF 1046), and the Personnel Security Assurance Program (10 CFR 710); continue to survey DOE sites on the degree of workplace violence and establish a repository for workplace violence information; complete work on DOE's "No Smoking Rule"; provide occupational medicine expert consultation and specific studies to address concerns associated with the operation of DOE site occupational medicine programs. Issue guidance for the medical aspects of the site Contractor Employee Assistance Program.	300	485	485
- Continue to assist DOE with the Radiation Emergency Accident Center Training Site (REAC/TS) support.	<u>300</u>	<u>300</u>	<u>300</u>
TOTAL Occupational Medicine	\$6,000	\$11,335	\$12,426

III. Performance Summary - Accomplishments (continued)

Epidemiology

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Continue collaboration in epidemiologic studies conducted under the Memorandum of Understanding with the Department of Health and Human Services. Under this program, 47 health studies were initiated; 23 worker health studies are completed; and 24 additional studies were continued in FY 1998. Four to six new studies are expected in FY 1999. Major environmental dose reconstruction projects at Hanford and Fernald have also been completed and the dose reconstruction project at Savannah River continues in FY 1998. The program supports multiple community outreach and educational efforts and has initiated projects with eight Indian nations near Hanford to develop individual, culturally-based, environmental dose reconstruction strategies. Some of these are to be concluded in FY 1998. Two million dollars is included in FY 1998 for the Hanford Thyroid Disease Study.	\$14,768	\$ 16,000	\$ 14,130
- In FY 1998, State Health Agreements will be completed for studies conducted by the states of Colorado and Tennessee.	5,000	4,000	0
- Continue funding for activities under the Epidemiologic Center for Statistics and Analysis to evaluate worker health and safety. Continue epidemiologic surveillance of DOE workers; add the Oak Ridge Reservation to the epidemiologic surveillance program; add selected dosimetry information to the data collection; make reports available through Internet access; publish findings in annual epidemiological surveillance reports; provide briefings and written materials to stakeholders on completed studies; identify emerging health issues requiring evaluation and conduct follow up investigations; continue communication activities with workforce and community.	2,000	2,050	2,300
- Continue national and international efforts to analyze biokinetic parameters for deposition and retention of transuranics in humans to improve dosimetry models and occupational radiation standards.	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
TOTAL Epidemiology	\$22,768	\$23,050	\$17,430

International

Marshall Islands:

- Conduct two medical missions, two environmental missions, and two whole body counting missions in the Marshall Islands.	\$6,800	\$6,800	\$6,800
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Other Programs:

- Continue selected projects (based on the FY 1998 program review) assessing health effects of the Chernobyl accident. Based on the results of a feasibility study, a major long-term study of leukemia in workers may occur.	1,500	1,500	1,500
- Continue U.S.-Russian collaborative efforts to full-scale cohort studies in the South Ural region and begin feasibility studies in other contaminated regions, as well as support involving analysis on molecular epidemiologic projects. This includes a leukemia study to investigate the health effects of workers and local populations associated with radiation exposures from the operations of the MAYAK weapons facility in Russia.	\$ 1,200	\$ 3,000	\$ 3,000
- Continue United States participation in Project Indalo.	<u>300</u>	<u>300</u>	<u>300</u>
TOTAL Other Programs:	<u>\$ 3,000</u>	<u>\$ 4,800</u>	<u>\$ 4,800</u>
Total Health Studies	<u>\$38,568</u>	<u>\$45,985</u>	<u>\$41,456</u>

Explanation of Funding Changes from FY 1998 to FY 1999**Occupational Medicine**

- Increase support for DOE former workers program, in response to Section 3162 of the Defense Authorization Act of 1993, reflects the continued medical surveillance phase of the initial six projects and the transition of four new pilot programs at four additional sites. (+\$1,091,000)

Epidemiology

- Completion of the Hanford Thyroid Disease Study. (-\$ 2,000,000)
- Increase funding for studies conducted under the Memorandum of Understanding with the Department of Health and Human Services. (+\$130,000)
- Completion of State Health Agreements Program. (-\$4,000,000)
- Increase Epidemiologic Surveillance programs to include an additional 12,000 workers at the diverse facilities of the Oak Ridge site. To date, no ongoing health surveillance program has been implemented at the site, but past worker studies have found excesses of leukemia and lung cancer in the workforce, and workers have expressed continuing concern about bladder cancer and potential cyanide exposure. In addition, the Epidemiologic Center will be incorporated into the Epidemiologic Surveillance program. (+\$250,000)

ENVIRONMENT, SAFETY AND HEALTH DEFENSE

RADIATION EFFECTS RESEARCH FOUNDATION

I. Mission Supporting Goals and Objectives:

The Atomic Bomb Casualty Commission (ABCC) was established in 1946 to investigate the effects of radiation exposure in survivors of the atomic bombings of Hiroshima and Nagasaki. In April 1975, the Radiation Effects Research Foundation (RERF) was established as a full successor to the ABCC. Annual funding for the operation of the RERF is provided by the Government of Japan through the Ministry of Health and Welfare and the U.S. Government through DOE.

The objective of the RERF is to conduct analysis, for peaceful purposes, on the medical effects of radiation on man or diseases that may be affected by radiation, with a view to contributing to the maintenance of the health and welfare of atomic bomb survivors and to the enhancement of the health of all mankind. The EH prioritization criteria supports ongoing analysis of radiation-exposed populations in Japan. The efforts of the RERF studies cut across the Department's organizational entities.

The RERF programs at the major laboratories in Hiroshima and Nagasaki consist of the following analysis of fixed populations: the Life Span Study, the Adult Health Study, the Pathology Program, the Genetic Program (mortality study of survivors, cytogenetics study, biochemical genetics study, growth and development study), and a series of small substudies. The results of these analysis will be used to validate existing radiation protection standards or become the basis for changing those standards.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
RERF	\$15,000	\$14,000	\$14,000	\$0	0%

III. Performance Summary - Accomplishments

Radiation Effects Research Foundation

- Continue support for RERF studies (e.g., Life Span Study, Adult Health Study, the Genetic Program) for atomic bomb survivors in Hiroshima and Nagasaki. Continue revised cost-sharing arrangement with the Japanese government that allows for reduced and stable funding by the DOE.

Total Radiation Effects Research Foundation

<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
<u>\$15,000</u>	<u>\$14,000</u>	<u>\$14,000</u>
<u>\$15,000</u>	<u>\$14,000</u>	<u>\$14,000</u>

Explanation of Funding Changes FY 1998 to FY 1999

- The program remains level funded from FY 1998 to FY 1999.

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
OTHER DEFENSE ACTIVITIES
(Tabular dollars in thousands, Narrative in whole dollars)
ENVIRONMENT, SAFETY AND HEALTH DEFENSE
PROGRAM DIRECTION

I. Mission Supporting Goals/Ongoing Responsibilities:

Program Direction in this account provides overall direction and administrative support for Environment, Safety and Health (EH) defense programs to ensure that all operations are conducted in the most efficient, effective manner.

Program Direction in this account has been grouped into two categories:

Salaries and Benefits provide funding for a Federal staff who have the technical expertise required to carry out the essential EH mission. The EH mission requires experts to develop overall environment, safety and health policy for DOE sites and facility operations; to provide a central and coordinated source of technical expertise to all field elements; to provide a central clearing house for information, analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex; to provide the Department with independent oversight capability as well as health studies endeavors; and perform activities relative to environment, safety and health programs across the DOE complex.

Travel includes all costs of transportation, subsistence, and incidental travel expenses of EH's Federal employees in accordance with Federal Travel Regulations. This also includes travel costs associated with the permanent change of duty station.

Support Services are not provided for in this decision unit. EH's support services has been reduced based on Congressional direction.

Other Related Expenses are not provided in this decision unit.

**ENVIRONMENT, SAFETY AND HEALTH DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

II. Funding Table:

	FY 1997 Current <u>Appropriation</u>	FY 1998 Current <u>Appropriation</u>	FY 1999 <u>Request</u>	<u>\$ Change</u>	<u>% Change</u>
<u>Headquarters</u>					
Salaries and Benefits	\$ 9,706	\$ 19,000	\$ 4,269	\$ -14,731	- 78%
Travel	<u>1,000</u>	<u>1,000</u>	<u>500</u>	<u>-500</u>	-50%
TOTAL	\$ 10,706	\$ 20,000	\$ 4,769	\$ -15,231	-76%
Full Time Equivalents	95	203	46		

**ENVIRONMENT, SAFETY & HEALTH DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

III. Performance Summary -

Salaries and Benefits:

- | | <u>FY 1997</u> | <u>FY 1998</u> | <u>FY 1999</u> |
|---|-----------------------|-----------------------|-----------------------|
| - Salaries and Benefits changes reflect the revised FTE split between Energy Supply and Other Defense Activities. | \$ 9,706 | \$19,000 | \$ 4,269 |

Travel:

- | | | | |
|---|--------------|--------------|------------|
| - Travel requirements reflect the revised FTE split between Energy Supply and Other Defense Activities. | <u>1,000</u> | <u>1,000</u> | <u>500</u> |
|---|--------------|--------------|------------|

Total Program Direction

\$ 10,706	\$ 20,000	\$ 4,769
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IV. Explanation of Funding Changes FY 1998 to FY 1999

- Salaries, benefits, and travel requirements are decreased commensurate with the shift in Federal staff to EH's Energy Supply Appropriation (\$ -15,231,000).